

**PURPOSE**

The Utility Capital Improvements Program budget provides for the construction of wastewater systems and water transmission, distribution and supply facilities, to include the engineering and acquisition program for additional groundwater supplies. Other water and wastewater system improvements are financed by accumulated JCSA funds for rehabilitation, replacement, extensions and expansions.

**BUDGET COMMENTS**

This budget proposes to direct facility fees (the initial connection fees when a new house or business connects to the system) towards financing Expansion projects and to transfer budgeted operating fund revenue (commodity service charges) towards financing Rehabilitation and Replacement (R & R) projects.

**BUDGET SUMMARY**

	FY 02 Budget	FY 03 Adopted	FY 04 Adopted
<u>Revenues:</u>			
Prior Year Fund Balance	\$ 0	\$ 3,300,000	\$ 0
Debt Financing	0	9,500,000	0
Operating Fund Transfer	2,672,907	2,417,825	1,373,068
Facility Charges	<u>3,451,680</u>	<u>3,365,388</u>	<u>3,140,070</u>
Total Revenue	\$ <u>6,124,587</u>	\$ <u>18,583,213</u>	\$ <u>4,513,138</u>
<u>Expenditures:</u>			
Water Supply	\$ 2,386,587	\$ 14,108,213	\$ 1,223,138
Water Distribution	170,000	650,000	880,000
Water Storage	0	140,000	0
Water Transmission	500,000	700,000	200,000
Sewer System Improvements	2,888,000	2,625,000	1,710,000
Other Projects	<u>180,000</u>	<u>360,000</u>	<u>500,000</u>
Total Expenditures	\$ <u>6,124,587</u>	\$ <u>18,583,213</u>	\$ <u>4,513,138</u>

The FY 2003-2007 Capital Improvements Program (CIP) consists of six separate, but interrelated, segments of the utility program, all of which are important in keeping pace with County development. The proposed five-year plan defines an integrated program for the development of each of the six segments along parallel time frames, designed for adequate service to be provided in step with the County Comprehensive Plan and Strategic Management Plan. A brief description of the essential features of the six segments follows:

**1. WATER SUPPLY (105-100)**

Water Supply Escrow (1015) - This is a modified project request. This escrow account has been established to provide funding for new water supply projects in the future. This funding will allow the JCSA to explore other alternatives to meet projected water demands of James City County. Payments for costs to connect to the Newport News Waterworks will be made from this account. The existing fund balance of \$37,083 is requested to be carried forward in the FY 2003-2007 CIP with an additional \$7,138,279 requested over the five-year CIP to maintain this escrow. Funds used for this escrow are for expansion projects

Well Facility Upgrade (1025) - This is a modified project request. This project provides for the major repair or replacement of well facility pumps and motors due to age of the pumps and motors. The existing fund balance of \$35,859 is requested to be carried forward in the FY 2003-2007 CIP. A total of \$320,000 is requested over the next five years to complete this project. This is a rehabilitation project.

SCADA (1050) - This is a modified project request. Supervisory Control and Data Acquisition System (SCADA) project is moving into it's final Phase 3. This phase will bring all remaining water and sewer stations on line and in compliance with JCSA systems. Current indicators dictate the original project will require additional funding. The existing fund balance of \$889,049 is requested to be carried forward in the FY 2003-2007 CIP. A total of \$100,000 is requested in FY 2003 to complete this project. This is a replacement project.

Kristiansand Well (W-38) Upgrade (1105) - This is a modified project request and includes drainage improvements for storage tank overflows, drains and well flush water to eliminate water from backing into the well facility. The existing fund balance of \$15,865 is requested to be carried forward in the FY 2003-2007 CIP. A total of \$25,000 is requested in FY 2003 to complete this project. This is an upgrade project.

Groundwater Treatment (Desalination) Facility (1155) - This is a modified project request. This project provides for the development and construction of a Groundwater Treatment Facility to meet future water demands. Project will be funded by a combination of connection fees, utility revenue funds, and debt financing. The existing fund balance of \$2,422,100 is requested to be carried forward in the FY 2003-2007 CIP. A total of \$13,600,000 is requested over the next two years to complete this project. \$9.5 million of these funds will be obtained from a bond issue discussed on Page E-18. This is an expansion project.

Hansen Upgrade (XXXX) - This is a new project request. Hansen is the JCSA's fully automated maintenance management system. This project will increase the system's maintenance management capability, allow for interface with GIS, and provide better planning capabilities. This is an upgrade project.

Stonehouse Well (W-25) Upgrade (XXXX) - This is a new project request. The project will provide for electrical system improvements which will enhance facility reliability. This project is a system upgrade.

**2. WATER DISTRIBUTION (105-110)**

Water System Improvements (1150) - This is a modified project request. This project will provide funds for water distribution improvements to include installing water mains to close distribution loops and increase water main sizes to enhance water distribution. The existing fund balance of \$108,925 is requested to be carried forward in the FY 2003-2007 CIP. An additional \$1,195,000 is requested over the next five years to complete this project. This is a rehabilitation project.

Toano Water Main (1170) - This is a modified project request. This project includes connecting the remaining residencies along to the new water system along Forge Road, Church Lane, and Chesapeake Avenue. The existing fund balance of \$3,465 is requested to be carried forward in the FY 2003-2007 CIP. An additional \$20,000 is requested in FY 2003 to complete this project. This is an expansion project.

Pressure Reducing Valves (1180) - This is a modified project request. This project includes the installation of a Pressure Reducing Valve (PRV) building on the existing W-15 in the Jamestown 1607 neighborhood site with approximately 1,000 feet of 12-inch water main along Cardinal Acres Drive. The existing fund balance of \$106,181 is requested to be carried forward in the FY 2003-2007 CIP. An additional \$80,000 is requested in FY 2003 to complete this project. This is an expansion project.

Automatic Meter Reading System (1190) - This is a modified project request. This project provides for the replacement of existing water meter registers with an encoder register that will improve meter reading 2-3 times faster and can shorten billing cycle. The existing fund balance of \$71,478 is requested to be carried forward in the FY 2003-2007 CIP with an additional \$340,000 requested over the next two years to complete this project. This is a replacement project.

Waterline Replacement Escrow (XXXX) - This is a new project request. This project will provide replacement of aging waterlines that may be identified during the fiscal year. A total of \$2,560,000 is requested over the next five years to complete this project. This is a replacement project.

Canterbury Hill Waterline (XXXX) - This is a new project request. This project will allow for the replacement and upgrade of water distribution system serving the neighborhood. A total of \$190,000 is requested to complete this project. This is a replacement project.

Norge Area Waterline (XXXX) - This is a new project request. This project will allow for the replacement and upgrade of water distribution system serving the neighborhood. A total of \$350,000 is requested to complete this project. This is a replacement project.

Kingswood Area (XXXX) - This is a new project request. This project will allow for the replacement and upgrade of water distribution system serving the neighborhood. A total of \$375,000 is requested to complete this project. This is a replacement project.

**3. WATER STORAGE (105-120)**

Altitude Valves (ESH & Toano) (1235) - This is a modified project request. The current underground altitude valve will be replaced with an above ground valve to be located within the facility building. System Modeling analysis has determined the need to change the system to a lower operating pressure which will, in turn, allow for more frequent water turnover. The existing fund balance of \$72,538 is requested to be carried forward in the FY 2003-2007 CIP with an additional \$140,000 requested in FY 2003 to complete this project. This is a replacement project.

Water Storage Escrow (1240) - This is a modified project request. This project provides for the construction of multiple size water storage tanks in the vicinity of Monticello Avenue and Ironbound Road. The existing fund balance of \$1,521,992 is requested to be carried forward in the FY 2003-2007 CIP to complete this project. An additional \$750,000 is projected beginning in FY 2005 for a future storage tank. This is an expansion project.

#### **4. WATER TRANSMISSION (105-140)**

First Colony Waterline Replacement (1492) – This is a modified project request. This project will allow for the replacement of waterlines in First Colony. The existing fund balance of \$704,828 is requested to be carried forward in the FY 2003-2007 CIP. A total of \$500,000 is requested in FY 2003 to complete this project. This is a replacement project.

Transmission Main Improvements (1495) - This is a modified project request. This project provides for the replacement of water transmission lines to convey large volumes of water through existing distribution system to enhance system pressures, fire flows, and water quality. The existing fund balance of \$157,460 is requested to be carried forward in the FY 2003-2007 CIP. A total of \$1,200,000 in additional funding is requested over the five-year CIP. This is a replacement project.

#### **5. WASTEWATER IMPROVEMENTS (105-150)**

Odor Control System (2045) - This is a modified project request. The project will provide for the installation of an odor control system at the most offensive lift stations. The existing fund balance of \$25,564 is requested to be carried forward in the FY 2003-2007 CIP. An additional \$245,000 is requested over the five-year CIP to complete this project in. This is a rehabilitation project.

Sewer System Improvements (2100) - This is a modified project request. This project will provide funds for sewer system improvements during the next five years. The existing balance of \$81,547 is requested to be carried forward in the FY 2003-2007 CIP while an additional \$1,700,000 is required over the five-year CIP to complete this project. This is a rehabilitation project.

Lift Station Dry/Wet Well Rehabilitation (2266) – This is a modified project request. This contract will provide for leak repair, root intrusion, and structural defects in facility dry/wet wells. The existing balance of \$1,604 is requested to be carried forward in the FY 2003-2007 CIP while an additional \$850,000 is required over the five-year CIP to complete this project. It is anticipated that six to eight stations will be identified in the initial study. This is a rehabilitation project.

Lift Station 6-8 Andersons Corner Force Main (2305) - This is a modified project request. This project will allow for the installation of a new 12-inch force main that will tie directly into the HRSD line from Lift Station 6-8. The existing balance of \$1,100 is requested to be carried

forward in the FY 2003-2007 CIP while an additional \$670,000 is required in FY 2003 to complete this project. This is an expansion project.

Lift Station Controls (2310) – This is a modified project request. This project will provide for upgrade of facility controls, electrical wiring and generator replacement at six series stations. The existing balance of \$463,150 is requested to be carried forward in the FY 2003-2007 CIP while an additional \$505,000 is required in FY 2003 and FY 2004 to complete this project. This is a rehabilitation project.

Lift Station Upgrades (2320) - This is a new project request. This project will provide for the replacement of compressors at seven facilities as well as replacement of station electrical controls. A total of \$720,000 is requested in FY 2004 through FY 2007 to complete this project. This is a rehabilitation project.

Kristiansand Sewer Extension (2032) - This is a new project request. This project includes the design and construction of approximately 2,000 feet of gravity sewer line extensions in the Kristiansand Subdivision along Trolls Path, Viking Road, and Nina Road. A total of \$190,000 is requested in FY 2003 to complete this project. This is an expansion project.

Lift Station 4-6 & 1-9 Control Buildings (XXXX) - This is a new project request. This project includes the replacement of existing wood frame control buildings at LS 4-6 on Discovery Lane and LS 1-9 on Posie Circle. A total of \$130,000 is requested in FY 2003 to complete this project. This is a replacement project.

Lift Station 2-1 & 2-2 Upgrades (XXXX) - This is a new project request. This project will provide for the evaluation of LS 2-1 at Jamestown Ferry and LS 2-2 at Glasshouse to determine their capabilities and constraints to accommodate future flows as Jamestown Festival Park continues to expand. A total of \$50,000 is requested in FY 2003 to complete this project. This is an expansion project.

Lift Station 1-5 Windsor Forest Upgrade (XXXX) - This is a new project request. This project will provide for new pumps, motors and controls to accommodate increased flows and to allow for SCADA compatibility. A total of \$200,000 is requested in FY 2005 to complete this project. This is a replacement project.

Lift Station 5-4 Frank's Truck Stop Upgrade (XXXX) - This is a new project request. This station is located in a flood prone area. This project will provide for a new control building, remotely located from the pump dry and wet well along with new electrical controls and SCADA connection. A total of \$250,000 is requested in FY 2005 to complete this project. This is a replacement project.

Lift Station 3-9 Indigo Dam Road Upgrade (XXXX) - This is a new project request. This project provides for the replacement of obsolete control building. A total of \$150,000 is requested in FY 2004 to complete this project. This is a replacement project.

Lift Station 6-3 Handy Grocery Force Main Replacement (XXXX) - This is a new project request. The existing pump station force main is located in a wetlands area and has failed on several occasions. Repairs are difficult due to the force main location. This project provides for the replacement of the force main in a new alignment that will have more durable material and protect the environment. A total of \$135,000 is requested in FY 2003 to complete this project. This is a replacement project.

Sewer Bridge Rehabilitation (XXXX) - This is a new project request. This project provides for the replacement or repair of numerous aging sewer bridges that cross ravines to prevent the bridge from collapsing and creating sewer spills. This will be an ongoing project in which \$325,000 is requested over the five year CIP. This is a replacement project.

School Lane Sewer Replacement (XXXX) - This is a new project request. This project will provide for the replacement of approximately 2,000 feet of sewer line along School Lane due to cracks in pipes, open joints, heavy root intrusion, and inflow/infiltration. A total of \$230,000 is requested in FY 2003 and FY 2004 to complete this project. This is a replacement project.

**6. OTHER PROJECTS (105-160)**

Tewning Road Expansion (3005) - This is a modified project request. The JCSA/JCC complex located at Tewning Road continues to grow. These funds will be escrowed for the purchase of additional land. The existing balance of \$1,415,711 is requested to be carried forward in the FY 2003-2007 CIP while an additional \$1,250,000 is requested over the five-year CIP. This is an expansion project.

Heavy Equipment (3085) - This is a modified request to replace several heavy equipment items. Scheduled equipment replacement includes a new mini-excavator in FY 2003. Mini-jet vac truck, backhoe, and a one-ton truck in FY 2004. Jet/Vac truck, one-ton truck, and a crew-cab in FY 2005. Dump truck, line truck, and a backhoe in FY 2006. Pump & Haul truck and a dump truck are projected for replacement in FY 2007. The existing balance of \$13,874 is requested to be carried forward in the FY 2003-2007 CIP with an additional \$875,000 is requested over the five-year CIP. This is a replacement project.

**7. BANK ACCOUNT FUND BALANCE**

The JCSA Investment Policy statement was approved by the Board of Directors on September 18, 1995, and was amended April 22, 1997. The funds are managed by TRUSCO Capital Management and has a fund balance of \$21,725,591 as of February 28, 2002. The JCSA has \$17,206,190 committed to approved capital improvements as of February 28, 2002. The balance of \$4,519,401 is being held in reserve for critical emergencies (\$1,219,401) and construction of the new Groundwater Treatment Facility (\$3,300,000). This fund balance will fluctuate day-to-day as new revenue is deposited and expenditures are made for both operating costs and capital improvement projects.